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REMARKS

Claims 1-5 were pending in this application, claim 1 has been amended, and claims 2-3 and 5 have been canceled. Accordingly, claims 1 and 4 are presently being examined.

Section 1 of the Office Action objected to the specification and required correction because of the following informalities: (1) page 11, line 8 should be corrected to read "the third connector 158"; and (2) page 12, line 4 should be corrected to read "the buffer 52".

Applicants hereinabove have amended the paragraphs in the specification containing the typographical errors to read as indicated above. Support for these amendments can be found, inter alia, on page 11 in line 5, on page 10 in line 17 and in Fig. 4 of the subject specification. Accordingly, applicants respectfully submit that no new matter prohibited by 37 C.F.R. §1.121(f) has been introduced by these amendments.

In view of the amendments to the specification, and the remarks above, applicants respectfully submit that the informalities have been corrected and that the objection to the specification raised in the Office Action be reconsidered and withdrawn.

Sections 4 and 5 of the Office Action rejected claims 1 and 2 under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,002,385 to Silverbrook ("Silverbrook patent").

More specifically, the Office Action stated that each element of claim 1 was found in the Silverbrook patent except for the chassis, but that U.S. Patent No. 5,953,206 to Jondrow et al. ("Jondrow patent") teaches a chassis adapted to mechanically fix and clamp all components of a flat panel display device, and to shield the system board and prevent

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discharge of electromagnetic waves, and that it would have been obvious to one of ordinary skill in the art to utilize the electromagnetic interference shield taught by the Jondrow patent with the notebook computer of the Silverbrook patent to reduce unwanted radiation.

Applicants hereinabove have canceled claims 3 and 5, and have amended claim 1 to include the subject matter of canceled claims 3 and 5, and thus, recite: (1) "replaceable modular system board" elements that relate to the board's functionality, to wit: an analog/digital converter, an image processor, a low voltage differential signaling unit, and a main circuit unit to control these elements; and (2) a chassis having an insertion slot in a side wall to allow the system board to be separately mounted in the flat panel display device. Support for this amendment can be found, inter alia, from page 12, line 15 to page 13, line 17, on page 14 in lines 7 to 9, and in Figs. 4 and 5 of the subject specification.

Applicants respectfully submit that while the Silverbrook patent discusses a flat panel display device having a flat panel display which includes a system board, for example, the base computer system 2 of the Silverbrook patent, the Silverbrook patent provides no teaching or suggestion that the flat panel display device can be connected to different hardware for use as a display for different applications, such as televisions, personal computers, or electronic books, by replacing a modular system board in the flat panel display device as taught by the subject invention and as recited in amended claim 1, and further, that the system board can be separately mounted in the flat panel display device through an insertion slot in a side wall of the chassis.

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Instead, the 'flat panel display device' of the Silverbrook patent is a personal computer in which the 'system board', that is the "base computer system 2", includes many specialized functional components of a personal computer, such as a hard disk drive ("HDD"), a read-only compact disk ("CD-ROM"), a processor, and a keyboard interface. Accordingly, this 'system board' is not designed to be modular so as to be replaceable to cope with a changed hardware environment, that is, to match the flat panel display module with different kinds of hardware, such as televisions, personal computers, and electronic books by simply changing the system board as taught by the subject invention and as recited in amended claim 1. In other words, the Silverbrook patent fails to teach or suggest a flat panel display device designed to be matched with televisions or electronic books or personal computers by replacing an entire "base computer system 2" with another one. For example, because the flat panel display module of the Silverbrook patent is to be used as a monitor screen and is linked to the system board, which is a personal computer, a user replacing the system board for use with a television receiver, following the teaching of the Silverbrook patent, would have to provide a system board for the flat panel display module as part of the television receiver.

In contrast, the main purpose of the subject invention, as recited in amended claim 1, is to provide a flat panel display device capable of changing its application to display television signals, personal computer signals, electronic book signals, etcetera by using a replaceable modular system board having a function corresponding to the changed application, see page 15, in lines 11-13 of the subject specification, and by simply

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inserting the replaceable modular system board into an insertion slot in a side wall of the chassis of the flat panel display device, see page 15 in lines 17-19 of the subject specification. For example, with the subject invention as recited in amended claim 1, any user can simply change the "modular system board" to another one that can interface with a television receiver. In other words, by inserting a new system board into the insertion slot, the user can watch television programs with the same flat panel display as used for the personal computer. Applicants note that several types of "modular system boards" have already been developed by Applicants based on the subject invention as recited in amended claim 1. For at least these reasons, applicants respectfully submit that amended claim 1 is not anticipated by nor obvious over the Silverbrook patent.

Applicants have hereinabove canceled claim 2. Accordingly, applicants respectfully submit that the rejection of claim 2 is now moot.

In view of the amendment of claim 1, the cancellation of claim 2, and the remarks above, applicants respectfully request that the rejection of claims 1 and 2 as being anticipated by the Silverbrook patent be reconsidered and withdrawn.

Applicants also note that while claims 1 and 2 were not specifically rejected as being obvious over the Silverbrook patent in view of the Jondrow patent, the Office Action did present an argument relating to such a rejection.

Accordingly, applicants respectfully submit that in contrast to the notebook computer of the Jondrow patent, the chassis of the subject invention as recited in amended claim 1 is not a simple housing or frame. Instead, the subject invention teaches and recites in amended claim 1, the provision of an

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"insertion slot" at one side wall of the chassis for allowing the "modular system board" that matches with a particular hardware application to be separably mounted so as to be easily replaced with another one for a different application. Accordingly, applicants respectfully submit that the notebook computers of both the Silverbrook patent and the Jondrow patent, taken alone or in combination, fail to teach or suggest a replaceable modular system board or an insertion slot for such a system board in a sidewall of a chassis of a flat panel display device as taught by the subject invention and as recited in amended claim 1.

In view of the amendment of claim 1, the cancellation of claim 2, and the remarks above, applicants respectfully request submit that amended claim 1 is not obvious over the Silverbrook patent in view of the Jondrow patent.

Sections 6 and 7 of the Office Action rejected claim 3 under 35 U.S.C. 103(a) as being unpatentable over the Silverbrook patent in view of U.S. Patent No. 6,606,088 to Yang et al. ("Yang patent").

More specifically, the Office Action stated that the Silverbrook patent teaches each element recited in claim 3 except for a third connector, an analog-to-digital converter, an image processor, and a low voltage differential signaling unit, but that the Yang patent teaches a system board which includes a third connector (125), an analog-to-digital converter (126), an image processor (14), and a low voltage differential signaling unit (123). According to the Office Action, it would be obvious for one of ordinary skill in the art to provide such elements from the Yang patent to the system board of the Silverbrook patent to allow the system board to receive various types of

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video data, to select the desired video data, and to improve the direct current power source.

Applicants hereinabove have canceled claim 3. Nevertheless, applicants respectfully submit that in contrast to the subject invention and as recited in amended claim 1, the Yang patent neither teaches nor suggests mounting the components of its signal processor on a separate "replaceable modular system board", which matches with an intended application having predetermined hardware such as televisions and personal computers, and which is inserted in an insertion slot at one side wall of a chassis. In other words, according to the subject invention and as recited in amended claim 1, if the predetermined hardware is to be changed, then the "modular system board" is also changed to a one which matches another hardware application. Neither the Silverbrook patent nor the Yang patent, alone or in combination teach or suggest an insertion slot in the chassis of a flat panel display device for a separate replaceable modular system board. Thus, for at least this reason, applicants respectfully submit that the subject matter of claim 3 is not obvious from the Silverbrook patent in view of the Yang patent.

In view of the amendment of claim 1, the cancellation of claim 3, and the remarks above, applicants respectfully request that the rejection of claim 3 as being unpatentable over the Silverbrook patent in view of the Yang patent be reconsidered and withdrawn.

Section 8 of the Office Action rejected claims 4 and 5 under 35 U.S.C. 103(a) as being unpatentable over the Silverbrook patent in view of U.S. Patent No. 6,512,670 to Boehme et al. ("Boehme patent").

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More specifically, the Office Action stated that the Silverbrook patent teaches: (1) each element of claim 4 except for a system board which is replaceable to change the display function of the flat panel module into a display function for the new system board; and (2) each element of claim 5 except for a chassis having an insertion slot in a side wall, but that the Boehme patent teaches such a system board and a chassis with an insertion slot in a side wall.

Applicants respectfully submit that the Boehme patent relates to a detachable display unit for portable devices which can be replaced in the field for several reasons including servicing and upgrading. However, unlike the subject invention and as recited in amended claim 1, the entire detachable display unit of the Boehme patent, including any system boards in the detachable display unit for controlling the display module, are replaced to achieve the new display function.

In contrast, the main purpose of the subject invention as recited in amended claim 1 is to use one flat panel display device with any kind of hardware, such as televisions, personal computers, etcetera. Accordingly, a user need not replace an entire display unit as taught by the Boehme patent, but instead, as taught by the subject invention and as recited in amended claim 1, can simply insert a different system board into the display unit, that is, the flat panel display device. This functionality allows a user to use a display unit to the maximum life since the display device can be upgraded by simply inserting a new system board into the insertion slot formed at one sidewall of the chassis of the flat panel display device, an operation that only takes a few seconds.

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Although the Office Action also stated that the Boehme patent teaches that the chassis is provided at one sidewall thereof with a cartridge slot 36, applicants respectfully submit that cartridge slot 36 of the Boehme patent is a simple connector which functions as a connection between cartridge-style plug 34 and the cartridge slot. In contrast to the teaching of the Boehme patent, the insertion slot of the subject invention as recited in amended claim 1 does not simply 'connect' the flat panel display device to the hardware, but instead is provided to receive and accommodate the "replaceable modular system board" within a prearranged space in the chassis of the flat panel display device. Accordingly, for at least these reasons, applicants respectfully submit that neither the Silverbrook patent nor the Boehme patent, taken alone or in combination, teach or suggest the subject invention as recited in amended claim 1.

Because a claim which depends on another claim is subject to all the limitations of that other claim, applicants respectfully submit that claim 4 is not unpatentable over the Silverbrook patent in view of the Boehme patent for at least the same reasons discussed above with respect to amended claim 1.

In view of the amendments to claim 1, the cancellation of claim 5 and the remarks above, applicants respectfully request that the rejection of claims 4 and 5 as being unpatentable over the Silverbrook patent in view of the Boehme patent be reconsidered and withdrawn.

In view of the amendments to claim 1, the cancellation of claims 2, 3, and 5, and the remarks above, applicants respectfully request that the objections and rejections in the Office Action be reconsidered and withdrawn, submit that this

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application is in condition for allowance, and earnestly solicit a notice of allowance.

If a telephone interview would be of assistance in advancing prosecution of the subject application, applicants' undersigned attorney invites the Examiner to telephone him at the number provided below.

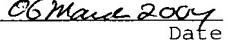
No fee is deemed necessary in connection with the filing of this Amendment. However, if any fees are required, authorization is hereby given to charge the amount of any such fee to Deposit Account No. 03-3125.

Respectfully submitted,



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